

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing of claims in the application:

Listing of the Claims:

Claims 1-22 (canceled).

1 Claim 23 (currently amended): A fibre reinforced  
2 pressurizable structure comprising a unitized integrally  
3 formed gas or fluid-tight body having a continuous outer  
4 circuferential surface with a rotation-symmetrical axis that  
5 terminates in axial ends, the body being overwound as an  
6 isotensoide with one or more fibre filaments, the fibre  
7 filaments having a longitudinal axis defined along their  
8 length, wherein the radius of the body outer surface varies  
9 with respect to a the rotation-symmetrical axis of the  
10 pressurizable structure, such that said body comprises outer  
11 surface defines at least one concave surface section spaced  
12 apart from the axial ends, wherein each concave surface  
13 section has a local minimum radius, and the outer surface  
14 further comprising defines at least one convex surface  
15 section spaced apart from the axial ends, wherein each  
16 convex surface section has a local maximum radius, wherein  
17 at least one concave surface section about its entire outer  
18 surface is continuously overwound with a fibre filament as  
19 an isotensoide.

1  
1 Claim 24 (previously presented): A fibre reinforced  
2 pressurizable structure according to claim 23, wherein the  
3 fibre filaments overwinding the at least one concave surface

4 section comprise a plurality of substantially straight fibre  
5 filaments forming a hyperboloid.

1  
1 Claim 25 (previously presented): A fibre reinforced  
2 pressurizable structure according to claim 23, wherein the  
3 pressurizable structure is quasi-geodesically overwound in a  
4 continuous fashion.

1  
1 Claim 26 (previously presented): A fibre reinforced  
2 pressurizable structure according to claim 23, wherein the  
3 longitudinal orientation of the fibre filament along a  
4 finite length thereof is oriented substantially  
5 perpendicular with respect to the rotation-symmetrical axis  
6 of the structure.

1  
1 Claim 27 (currently amended): A fibre reinforced  
2 pressurizable structure according to claim 23, wherein the  
3 fibre filaments undergo torsion with respect to the  
4 longitudinal center-line ~~of the pressurizable structure~~  
5 thereof when the pressurizable structure is in a pressurized  
6 state, whereby substantially one side of the curved fibre  
7 circumference remains in contact with the body in the at  
8 least one concave surface section.

1  
1 Claim 28 (currently amended): A fibre reinforced  
2 pressurizable structure according to claim 23, characterized  
3 in that the fiber filaments are twisted longitudinally  
4 during fabrication of the structure ~~in a pressurized state~~  
5 ~~there is reversal of the~~ so that one circumferential side of  
6 the fiber filaments are in contact with the at least one  
7 concave surface section ~~relative to~~ and the other  
8 circumferential side of the fiber filaments are in contact

9 with the at least one convex surface section.

Claims 29-38 (canceled).

1 Claim 39 (currently amended): A fibre reinforced  
2 pressurizable structure according to claim 23, wherein the  
3 body is flexible, i.e., non-rigid, and formed about the  
4 fibre filaments ~~are supported by a matrix material~~.

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1 Claim 40 (previously presented): A fibre reinforced  
2 pressurizable structure according to claim 23, whereby the  
3 axial length of at least one axial section of the  
4 pressurizable structure is variable with respect to the  
5 longitudinal axis of the pressurizable structure.

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1 Claim 41 (previously presented): A fibre reinforced  
2 pressurizable structure according to claim 23, wherein at  
3 least one axial section of the pressurizable structure is  
4 pivotable with respect to the longitudinal axis of the  
5 pressurizable structure.

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1 Claim 42 (previously presented): A fibre reinforced  
2 pressurizable structure according to claim 23, wherein at  
3 least one axial section of the structure is pivotable with  
4 respect to an axis, wherein the axis is orthogonal to the  
5 longitudinal axis of the pressurizable structure.

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1 Claim 43 (previously presented): A fibre reinforced  
2 pressurizable structure according to claim 40, wherein at  
3 least one axial section of the pressurizable structure  
4 comprises a combination of at least two of the following  
5 technical elements; (i) at least one axial section of the

6     pressurizable structure is pivotable with respect to the  
7     longitudinal axis of the pressurizable structure; (ii) the  
8     axial length of the at least one axial section of the  
9     structure is variable with respect to the longitudinal axis  
10    of the pressurizable structure; (iii) the axial section of  
11    the structure is pivotal with respect to an axis, wherein  
12    the axis is orthogonal to the longitudinal axis of the  
13    pressurized structure.

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1     Claim 44 (currently amended): A fibre reinforced  
2     pressurizable structure according to claim 23, wherein the  
3     pressurizable structure comprises ~~a one, two or three-~~  
4     ~~dimensional arrangement~~ an array of a plurality of  
5     pressurizable fuel tanks or pipelines.

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1     Claim 45 (previously presented): A fibre reinforced  
2     pressurizable structure according to claim 24, wherein the  
3     pressurizable structure further comprises a spring that  
4     provides a load-displacement function.

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1     Claim 46 (previously presented): A fibre reinforced  
2     pressurizable structure according to claim 23, wherein the  
3     pressurizable structure further comprises an actuator for  
4     applications in elevators, excavators and industrial robots,  
5     among others.

1  
1     Claim 47 (previously presented): A fibre reinforced  
2     pressurizable structure according to claim 23, wherein the  
3     pressurizable structure provides a shoring or strutting  
4     function in combination with construction beams.

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1     Claim 48 (previously presented): A fibre reinforced

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2     pressurizable structure according to claim 47, wherein the  
3     shoring or strutting functions in combination with  
4     construction beams are adaptable to the Eigen-frequencies of  
5     the pressurizable structure.